

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Hiroyuki SAKAMOTO et al.

Appl. No.: Not yet designated

Group Art Unit: Not yet designated

Confirmation No.: Not yet designated

Examiner: Not yet designated

Filed: November 26, 2001

For: METHOD OF FORMING COATING
FILMS AND COATED ARTICLE

November 26, 2001

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

The claims are amended as follows:

5. (amended) The method of forming a coating film according to Claim 1,
wherein the resin (A) is at least one resin (A2) selected from the group consisting of
polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins,
acrylic resins and modifications of these.

7. (amended) The method of forming a coating film according to Claim 2,
wherein the electrodeposition coating [1] contains a resin (C1) having a number average
molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

8. (amended) The method of forming a coating film according to Claim 1,
wherein the electrodeposition coating [2] contains a resin (A3) having a sulfonium group, an aliphatic hydrocarbon group of 8 to 24 carbon atoms, which optionally contain an unsaturated double bond within the chain thereof, and a propargyl group.

10. (amended) The method of forming a coating film according to Claim 8,
wherein the electrodeposition coating [2] contains a resin (C2) having a number average molecular weight of 1,000 to 30,000, and

said resin (C2) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

11. (amended) The method of forming a coating film according to Claim 1,
wherein the electrodeposition coating [1] and the electrodeposition coating [2] each contains a metal acetate and/or an acetylacetonate complex as a catalyst, and

said metal is at least one member selected from the group consisting of copper, cerium, aluminum, tin, manganese, zinc, cobalt and nickel.

12. A coated article having the coating film formed by the method of forming a coating film according to Claim 1.

Claims 13-20 are added as new claims.

13. The method of forming a coating film according to Claim 2,

wherein the resin (A) is at least one resin (A2) selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins and modifications of these.

14. The method of forming a coating film according to Claim 3,

wherein the electrodeposition coating [1] contains a resin (C1) having a number average molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

15. The method of forming a coating film according to Claim 4,

wherein the electrodeposition coating [1] contains a resin (C1) having a number average molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

16. The method of forming a coating film according to Claim 9,
wherein the electrodeposition coating [2] contains a resin (C2) having a number average
molecular weight of 1,000 to 30,000, and
said resin (C2) is at least one member selected from the group consisting of polyester
resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic
resins, and modifications of these.

17. The method of forming a coating film according to Claim 2,
wherein the electrodeposition coating [1] and the electrodeposition coating [2] each
contains a metal acetate and/or an acetylacetonate complex as a catalyst, and
said metal is at least one member selected from the group consisting of copper, cerium,
aluminum, tin, manganese, zinc, cobalt and nickel.

18. The method of forming a coating film according to Claim 5,
wherein the electrodeposition coating [1] and the electrodeposition coating [2] each
contains a metal acetate and/or an acetylacetonate complex as a catalyst, and
said metal is at least one member selected from the group consisting of copper, cerium,
aluminum, tin, manganese, zinc, cobalt and nickel.

19. A coated article having the coating film formed by the method of forming a coating
film according to Claim 2.

20. A coated article having the coating film formed by the method of forming a coating film according to Claim 5.


REMARKS

Claims 5, 7, 8, and 10-12 have been amended and new claims 13-20 have been added to place the claims in desired appropriate form for examination. Thus all of the claims are now in appropriate form, and the Examiner is respectfully requested to proceed with the examination.

Early favorable action is earnestly solicited.

In the event that the Examiner believes that it may facilitate the further prosecution of this application, the Examiner is invited to contact the undersigned attorney at the local Washington, D.C. telephone number indicated below.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The claims are amended as follows, with additions indicated by underlining and deletions indicated by strikethrough:

5. (amended) The method of forming a coating film according to ~~any one of Claims 1 and 2~~ Claim 1,

wherein the resin (A) is at least one resin (A2) selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins and modifications of these.

7. (amended) The method of forming a coating film according to ~~any one of Claims 2 to 4~~ Claim 2,

wherein the electrodeposition coating [1] contains a resin (C1) having a number average molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

8. (amended) The method of forming a coating film according to ~~any one of Claims 1 to 7~~ Claim 1,

wherein the electrodeposition coating [2] contains a resin (A3) having a sulfonium group, an aliphatic hydrocarbon group of 8 to 24 carbon atoms, which optionally contain an unsaturated double bond within the chain thereof, and a propargyl group.

10. (amended) The method of forming a coating film according to ~~any one of Claims 8 and 9~~ Claim 8,

wherein the electrodeposition coating [2] contains a resin (C2) having a number average molecular weight of 1,000 to 30,000, and

said resin (C2) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

11. (amended) The method of forming a coating film according to ~~any one of Claims 1 to 10~~ Claim 1,

wherein the electrodeposition coating [1] and the electrodeposition coating [2] each contains a metal acetate and/or an acetylacetonate complex as a catalyst, and

said metal is at least one member selected from the group consisting of copper, cerium, aluminum, tin, manganese, zinc, cobalt and nickel.

12. A coated article having the coating film formed by the method of forming a coating film according to ~~any one of Claims 1 to 11~~ Claim 1

Claims 13-20 are added as new claims.

13. The method of forming a coating film according to Claim 2,

wherein the resin (A) is at least one resin (A2) selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins and modifications of these.

14. The method of forming a coating film according to Claim 3,

wherein the electrodeposition coating [1] contains a resin (C1) having a number average molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

15. The method of forming a coating film according to Claim 4,

wherein the electrodeposition coating [1] contains a resin (C1) having a number average molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

16. The method of forming a coating film according to Claim 9,

wherein the electrodeposition coating [2] contains a resin (C2) having a number average molecular weight of 1,000 to 30,000, and

said resin (C2) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, acrylic resins, and modifications of these.

17. The method of forming a coating film according to Claim 2,

wherein the electrodeposition coating [1] and the electrodeposition coating [2] each contains a metal acetate and/or an acetylacetonate complex as a catalyst, and

said metal is at least one member selected from the group consisting of copper, cerium, aluminum, tin, manganese, zinc, cobalt and nickel.

18. The method of forming a coating film according to Claim 5,

wherein the electrodeposition coating [1] and the electrodeposition coating [2] each contains a metal acetate and/or an acetylacetonate complex as a catalyst, and

said metal is at least one member selected from the group consisting of copper, cerium, aluminum, tin, manganese, zinc, cobalt and nickel.

19. A coated article having the coating film formed by the method of forming a coating film according to Claim 2.

20. A coated article having the coating film formed by the method of forming a coating film according to Claim 5.